

LDWSF
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04/14/87

EPA REGION 10 DIVE REPORT

FROM: Michael F. Matta

DATE OF REPORT: 4/14/87

TO: (1) REGION 10 DIVING OFFICER DWK 4/15/87

DATE OF DIVE: 4/6/87

for (2) DIRECTOR, ESD LBS

LOCATION: Marine Power & Equipment - Duwamish River site

PURPOSE OF DIVE: To determine the extent of any sandblasting debris that may be present on the river bottom near the MP&E site.

ENVIRONMENTAL CONDITIONS

SITE DESCRIPTION: Industrial type ship repair facility on the Duwamish river

FAUNA: Crabs, Brackish-water invertebrates, fairy shrimp,

FLORA: _____

WATER TEMP: 11°C U/W VISIBILITY: 6 Ft. BOTTOM TYPE: hard mud

SOURCES OF POLLUTION: Industrial outfalls at various other points along the river, heavy metal contamination.

HAZARDS: Entanglements, boat traffic.

TIDES (DATE: 4/6/87)

TIME	HEIGHT (FT)	CURRENT
0023	10.0	1/2 k. down-
0549	7.8	stream.
0915	8.1	
1710	1.2	

TIDES (DATE: _____)

TIME	HEIGHT (FT)	CURRENT

TIDES (DATE: 19 Dec)

TIME	HEIGHT (FT)	CURRENT

WIND: calm AIR TEMP: 50°F.

WEATHER: Partly cloudy

MALFUNCTIONS: None

USEPA SF



1345220

EPA REGION 10 DIVE REPORT FORM

DIVING ACTIVITY

TYPE: SCUBA DIVING PLATFORM: Small Boat COMMUNICATION: Visual

SPECIAL EQUIPMENT: AGA Full face mask, Viking dry suit.

DIVEMASTER: M. Matta TENDER: Other Divers COX'N: D. Terpening

DIVERS: R. Albright, B. Duncan, M. Matta

DIVER	JOB	TIME		BOTTOM TIME	DEPTH		REMARKS
		IN	OUT		MAX	WORK	
Matta		1141	1152	11 min	30'	30'	
Albright		1141	1152	11 min	30'	30'	
Matta		1224	1239	15 min	35'	35'	
Albright		1224	1239	15 min	35'	35'	
Matta		1342	1402	20 min	30'	30'	
Duncan		1342	1402	20 min	30'	30'	
Matta		1427	1434	7 min	30'	30'	
Duncan		1427	1434	7 min	30'	30'	

DATE OF DEBRIEFING: 4/6/87 After dive.

SUMMARY/OBJECTIVES ACHIEVED:

A line with markings affixed at every 5 meters was sunk for divers to follow on the first two dives. On the first dive Matta and Albright entered the water near the shore at mid-slip and moved along the bottom toward the river. The bottom was essentially clear of large debris and consisted of hard mud. At approximately 50 meters from the point of entry, the divers encountered a large mound of mud which was about 4 feet high and about 8 feet in diameter and perforated with round holes which were about 3/4 inch in diameter. This mound appeared as though it had been moved by some mechanical device.

On the second dive, Matta and Albright entered the water at the upstream outboard dolphin off of the end of the table dock. (see fig. 2) The divers then followed the line as in the first dive proceeding downstream and then inward toward the pier and the dry dock. In this area, the bottom consisted of hard mud and there were no large piles of debris present. On this dive, divers noted a light dusting of sandblasting debris off of the river side of the drydock. Divers also investigated the corner of the the pier between the table dock and the dry dock and found no sandblasting debris there.

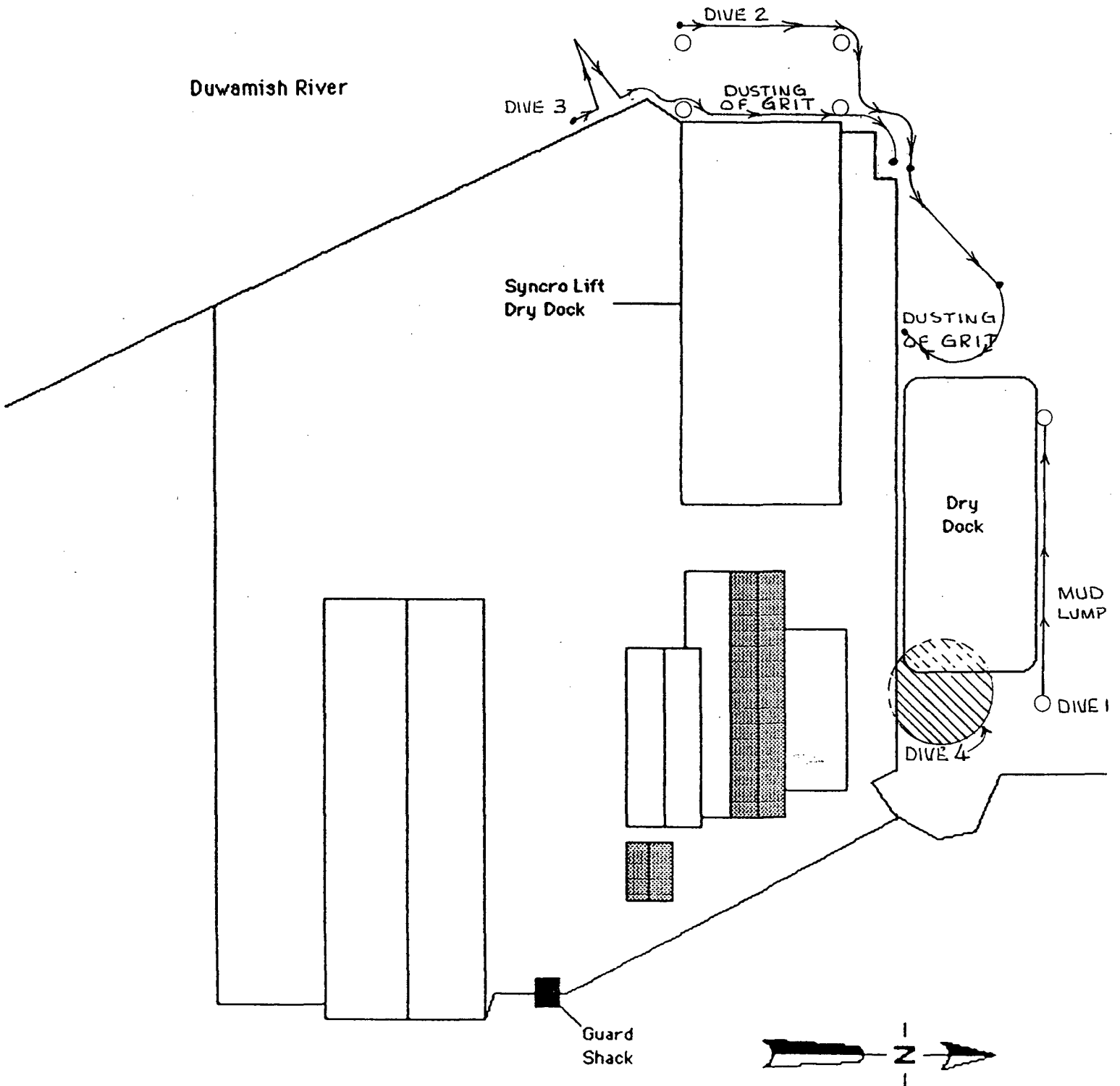
On dive 3 Duncan and Matta entered the water at the pier face upstream of the table dock and first followed the bottom out into the river for about 50 feet. The divers then returned to the base of the pier pilings and followed the pilings on the bottom to the end of the table dock. The divers then followed the edge of the table dock

in a direction downstream and followed the base of the pilings around the edge of the pier (fig. 2). At the beginning of the dive at the pier face, the divers noted small amounts of metal debris at the base of the pilings and in the adjacent areas toward the river channel. The bottom consisted of hard mud, and no sandblasting grit was apparent in the sediment. On the bottom along the edge of the table dock there was a dusting of sandblasting grit on the sediment surface which was about 1/2 inch thick. The bottom along the edge of the table dock was mounded and sloped downward toward the table dock. There were no apparent deposits of sandblasting grit noted on the bottom at the end of the pier between the table dock and the dry dock.

On the forth dive, Duncan and Matta inspected the bottom in a small area along the pier face east of the drydock. The bottom again was a hard mud and no apparent deposits of sandblasting grit were found.

MARINE POWER & EQUIPMENT COMPANY

6701 Fox Ave. S., Seattle, Washington



Scale Is Estimated

FIGURE 2

EPA REGION 10 DIVE REPORT

FROM: Michael F. Matta

DATE OF REPORT: 3/13/87

TO: (1) REGION 10 DIVING OFFICER DWK 3-13-87

DATE OF DIVE: 2/25 to 2/27/87

(2) DIRECTOR, ESD UBS 4/1/87

LOCATION: Marine Power and Equipment Co. 1441 N. Northlake Wy., Seattle, Wa.

PURPOSE OF DIVE: To evaluate the areal extent and thickness of sandblasting debris on the lake bottom adjacent to the MP&E property.

ENVIRONMENTAL CONDITIONS

SITE DESCRIPTION: Industrial site on a lake in an urban area.

FAUNA: fish, crayfish, freshwater "ferry" shrimp

FLORA: none

WATER TEMP: 45° F. U/W VISIBILITY: 5ft BOTTOM TYPE: mud ^{& silt} with debris

SOURCES OF POLLUTION: Heavy metal pollution possibilities from ship repair activities.

HAZARDS: Danger of entanglement or injury from various metal debris.

TIDES (DATE: _____)

TIME	HEIGHT (FT)	CURRENT
	<u>None</u>	

TIDES (DATE: _____)

TIME	HEIGHT (FT)	CURRENT

TIDES (DATE: _____)

TIME	HEIGHT (FT)	CURRENT

WIND: S 8 Kts AIR TEMP: 45° to 50° F

WEATHER: Partly Cloudy - Occasional showers

MALFUNCTIONS: none ~~none~~ Matta lost knife & sampling device on 2/25. Lynn Frandsen became congested after diving on 2/26 and was unable to dive 2/27. Rick Albright developed a cold mid-week after returning from Boise and was unable to dive 2/26 or 2/27.

EPA REGION 10 DIVE REPORT FORM

DIVING ACTIVITY

TYPE: SCUBA DIVING PLATFORM: Boat COMMUNICATION: Visual

SPECIAL EQUIPMENT: AGA® Full Face mask.

DIVEMASTER: Matta TENDER: Other divers COX'N: other divers

DIVERS: Matta, Karna, Frandsen, Webb, Albright-(did not dive)

DIVER	JOB	TIME		BOTTOM TIME	DEPTH		REMARKS
		IN	OUT		MAX	WORK	
Matta	Measure sediment	1151	1217	26 min	40'	40'	
Webb	Record	1151	1217	26 min	40'	40'	
Matta	Measure	1245	1319	34 min	42'	42'	
Webb	Record	1245	1319	34 min	42'	42'	
Matta	Measure	1519	1549	30 min	50'	50'	
Karna	Camera	1519	1549	30 min	50'	50'	
----- 26 FEB -----							
Matta	Measure	1054	1130	36 min	35'	35'	
Karna	Camera	1054	1130	36 min	35'	35'	
Matta	Measure	1210	1249	39 min	42'	42'	
Frandsen	Record	1210	1249	39 min	42'	42'	
Matta	Measure	1433	1505	32 min	45'	45'	
Karna	Camera	1433	1505	32 min	45'	45'	
Karna	Measurer	1552	1602	10 min	40'	40'	
Frandsen	Recorder	1552	1602	10 min	40'	40'	
----- 27 FEB -----							
Matta	Measurer	1043	1055	12 min	45'	45'	
Karna	Recorder	1043	1055	12 min	45'	45'	
Matta	Measurer	1234	1250	16 min	45'	45'	
Karna	Recorder	1234	1245	11 min	45'	45'	

DATE OF DEBRIEFING: 27 Feb. 87

SUMMARY/OBJECTIVES ACHIEVED:

The divers were able to measure the depth of accumulation of sandblasting debris by deploying a line marked off in 5-meter increments along the bottom of the lake and measuring the depth of the accumulation at regular intervals along the line. Determinations of sediment depth were made by digging a small hole in the lake bottom and measuring the depth of accumulation of the material with a carpenter's rule.

In making observations of the lake bottom, divers encountered various metal debris such as sheet metal, large containers and wire cable. On line 2 in figure 1 divers encountered patches of a gray-white powdery substance at the 55 to 80 meter marks

*please include
figure w/ this report*

along line 2. This material was 1 inch below the sediment surface and was 2 inches thick.

The thickest accumulations of sandblasting grit were found west of the 50-Ton craneway. Alongside the craneway in this area divers also found large pieces of metal debris and other miscellaneous refuse.

Reference other report prepared where you est. 9,000 yd³ of material needs to be removed.